

IRISH COAL INDUSTRY COMMITTEE, 1919.

REPORT OF THE COMMITTEE.

Presented to Parliament by Command of His Majesty.



DUBLIN:
PUBLISHED BY THIS MAJESTY'S STATIONERY OFFICE.

To be purchased through any Bookseller or directly from

E. PONSONBY, LTD., 126, GRAFTON STREET, DUBLIN;

Or from H.M. STATIONERY OFFICE at the following Addresses:—

IMPERIAL HOUSE, KINGSWAY, LONDON, W.C. 2, and 28, ALBANIAN STREET, LONDON (S.W. 1);
37, PETER STREET, MANCHESTER; 1, ST. ANDREW'S CRESCENT, CARDIFF;
23, FORTH STREET, EDINBURGH.

1920.

[Cmnd. 650.]

Price Two Pence Net.



TABLE OF CONTENTS.

	PAGE
Warrants appointing the Committee ...	3
 REPORT :	
Part I.—Position of the Coal Industry in Ireland ...	4
Part II.—Labour Conditions ...	8
Part III.—Administration and Ownership of Mines and Minerals ...	9
Part IV.—Recommendations ...	13
Part V.—Nationalization ...	16
Part VI.—Miscellaneous ...	15
Addendum to Report by Messrs. Thomas Foran, Michael Gilmartin and Alderman William O'Brien ...	16

I, the Right Honourable Ian Macpherson, hereby appoint the Right Honourable James O'Connor, Lord Justice of Appeal in Ireland, to be Chairman of the Committee appointed by me on the 21st May, 1919, for the purpose of inquiring into the position of and conditions prevailing in the coal industry in Ireland, in place of H G Burgess, Esquire, who has resigned

6

IAN MACPHERSON.

DUBLIN CASTLE,

15th October, 1919.

WARRANTS APPOINTING THE COMMITTEE.

I, the Right Honourable Ian Macpherson, hereby appoint:—

Mr. H. G. Burgess (Chairman),
Mr. Michael Layden,
Mr. J. J. Parkinson,
Captain Richard Henry Prior Wandesforde, D.L.,
Mr. Thomas Foran,
Mr. William O'Brien,
Mr. Michael Gilmartin,

to be a Committee for the purpose of inquiring into the position of and conditions prevailing in the Coal Industry in Ireland, and in particular as to—

- (a) the wages and hours of work in the various grades of colliery workers, and whether and, if so, to what extent, and by what method, such wages should be increased and hours reduced, regard being had to a reasonable standard of living amongst the colliery workers, and to the effect of such changes on the economic life of the country;
- (b) any inequalities between different grades of colliery workers as regards wages, hours of work, and other conditions, and whether, and if so, to what extent, any of these inequalities are unjustifiable and capable of remedy;
- (c) the cost of production and distribution in the coal industry, or any industry commonly carried on in connection therewith or as ancillary or incidental thereto, and the general organisation of the coalfield and the industry as a whole;
- (d) selling prices and profits in the coal industry or any industry commonly carried on in connection therewith or as ancillary or incidental thereto;
- (e) the social conditions under which colliery workers carry on their industry;
- (f) any scheme that may be submitted to or formulated by the Commissioners for the future organisation of the coal industry, whether on the present basis, or on the basis of joint control, nationalisation, or any other basis;
- (g) the effect of the present incidence of, and practice in regard to, mining royalties and way-leaves upon the coal industry and the cost of coal, and whether any and what changes in these respects are desirable;
- (h) the effect of the proposals under the above heads upon the development of the coal industry and the economic life of the country;

and I appoint Mr. George William Lawlor to be Secretary to the Committee.

IAN MACPHERSON.

DUBLIN CASTLE,

21st May, 1919.

REPORT

To the Right Honourable IAN MACPHERSON, Chief Secretary to the Lord Lieutenant of Ireland.

Part I.

POSITION OF THE COAL INDUSTRY IN IRELAND.

The warrant of appointment requested us to inquire into, amongst other things, the position of the Coal Industry in Ireland. This branch of our inquiry is of great importance, and we gave special attention to it, looking at the matter purely from the Irish standpoint. Several circumstances render the question of Ireland's coal supply of paramount importance to the country; first, the fact that she has hitherto depended, almost entirely, on Great Britain for her coal supply has been a serious drain upon her resources, a matter now aggravated by the great cost of the commodity; second, the development to the fullest possibility of any industry is of particular concern to a country which possesses such few industries as Ireland; third, the views about Irish coal are so widely divergent that reliable information on the subject is essential if the country is to face its economic problems with a clear and true vision. In connection with this branch of our inquiry a number of geological and mining experts, consumers of Irish coal, the owners of the principal Coal Mines in Ireland and representatives of the Miners have been examined. We have, therefore, had evidence from all possible sources, and we have some hope that our Report will conduce to accurate knowledge of the subject and to reasoned State action in consequence.

Ireland's Fuel.—Ireland consumes annually about four and a half million tons of coal, and five to six million tons of peat, equivalent, say, to two and a half million tons of coal. We are unable to say how much of this coal consumption is attributable to industrial and how much to household purposes, as no reliable statistics are available for the purpose. Of the coal thus consumed in Ireland, she produces, at present, 92,000 tons annually. Her production reached high water mark in 1850, being then 150,000 tons. From that time, when railway facilities enabled the British producer to compete on more favourable terms in the Irish market, Irish production gradually fell, up to 1914, when, owing to the shortage and increased cost of coal in Great Britain, and increased cost of freight, a slight upward tendency was shown.

The figures of Irish output are shown by the following table, prepared by Mr. E. J. Riordan, Secretary Irish Industrial Development Association:—

YEAR.	TONS.	YEAR.	TONS.	YEAR.	TONS.
1854	148,750	1909	89,392	1915	84,557
1864	125,000	1910	79,802	1916	89,833
1874	139,213	1911	84,564	1917	95,646
1884	122,431	1912	90,307	1918	92,001
1894	112,604	1913	82,521		
1904	105,637	1914	92,400		

Portion of the coal imported into Ireland is anthracite, but it is impossible to say how much, 38,000 tons per annum being definitely marked as such. It may be remarked here that the coal output of Great Britain is roughly 250 million tons annually.

Ireland's Coal Resources.—The annual output from the various Irish Mines during 1918 is shown by the following table, which also shows the number of men employed in each mine, including workmen above the surface as well as below:—

Name of Mine	Annual Output tons	Number Employed, men
Arigna Mining Company (Co. Roscommon)	7,434	65
Castlecomer Collieries, Ltd. (Co. Kilkenny)	63,675	364
Michael Layden (Co. Roscommon) (Co. Leitrim)	6,367	35
New Irish Mining Company (Queen's Co.)	7,086	60
Sieve Ardagh Collieries Co. (Co. Tipperary)	3,945	25
Various small mines	3,494	68
Total	92,001	617

All the localities in which coal is proved or reasonably presumed to exist in Ireland are well known. They are shown on the accompanying map prepared by Mr. Lyburn, Economic Geologist to the Department of Agriculture and Technical Instruction (Ireland).

MAP OF IRELAND SHOWING COALFIELDS.



Further, with one very important exception (the Coalisland area) the amount of reserves in each area, the nature of the coal, and the thickness of the seams are reasonably well known. The amount of reserves is shown by the following table:—

COAL RESOURCES OF IRELAND, INCLUDING SEAMS OF 1 FOOT OR OVER, TO
A DEPTH OF 4,000 FEET.

	Coal-Seams.		Actual Reserves (Calculation based on seam thickness and extent).		Probable Reserves (Approximate estimate).	
	No.	Thickness.	Area.	Metric Tons.	Area.	Metric Tons.
Ballymena	—	3 ft. assumed over whole area.	—	—	4½ sq. miles.	13,720,000
Tyrone—						
I.—Lower Coal— Measure Coals (Dungannon and Coalisland).	—	4 ft. assumed over whole area.	—	—	8 sq. miles.	31,210,000
II.—Middle Coal— Measure Coal (Coal- island).	—	43 ft. assumed over whole area in about nine seams.	—	—	Unknown.	(See text— probably large).
III.—Antraghane—	—	—	—	—	1.5th sq. miles.	3,900,000
Lough Allen—						
I.—North and South Arigna Areas.	3 2	1 ft. 8 in. 1 ft. 8 in.	149 acres. 2 9 sq. miles.	356,000 4,780,000	—	—
II.—Sieve-an-Isca Area	2	1 ft. 2 in.	3 1 sq. miles.	3,600,000	—	—
Leinster	—	4 (Jarrow)	—	—	3,810,000	—
		3 (Slane)	1 ft. 8 in. 94 sq. miles.	152,920,000	—	—
Tipperary	—	2	1 ft. 6 in. 10 3 sq. miles	15,000,000	—	—
TOTALS	—	—	—	189,590,000	—	47,630,000

Of the proved Irish minefields, the Leinster coalfield is far the most important. It embraces an area of 94 square miles; The New Irish Mining Co's collieries are at the North-end, the Castlecomer Company's collieries at the South. This area produces anthracite coal, which, as we are satisfied on the evidence, is equal to the best British anthracite. The coal mines in the Arigna district are semi-bituminous in quality.

The Coalisland area has great possibilities. This appears not alone from the evidence produced before us, but also from the Report of the expert (Mr. Forster Brown) employed by the Government to report on the boring operations in that district, undertaken during the War. The theory is that a vast trough extends from Fifeshire in Scotland across the Channel to Lough Neagh in Ireland and that this trough, which contains coal measures of great value in Fifeshire, Ayrshire, Lanarkshire and the Lothians probably contains coal measures of value in Ireland as well. Mining operations have been, more or less spasmodically carried on in the neighbourhood of Coalisland for many years. The actual results have not been satisfactory, but this is by no means conclusive, for the attempts to prove and work coal in this region have hitherto been on an inadequate scale to furnish a test of real value. By directions of the Government, boring was started in December, 1918, at Washing Bay, on the shores of Lough Neagh, and carried on to September, 1919, when the boring was abandoned. The spot for boring was carefully selected, but, as will happen in spite of all care and skill, it proved to be unfortunate, for the boring met with clay to an unexampled depth, 1,196 feet. The boring was continued to 1,766 feet in depth without reaching the carboniferous strata. At the present time,

Mr. Samuel Kelly, of Belfast, having acquired prospecting and mining rights in the locality, is causing boring operations on other sites to be carried out, and it is hoped that they may be productive of results of value to himself as well as to the community.

For the present, we must regard the Coalisland area as one of great possibilities, but nothing more. Turning to the rest of Ireland, the real difficulty is not the amount of reserves, but the thickness of the seams to be worked upon. A moment's consideration shows this. If a seam is thick enough, the miner at the face takes out coal and practically nothing but coal. If a seam is thin, he takes out coal, but has also to take out a great quantity of rock and other waste material to get the coal. The seams in Irish mines are mostly thin; those in the Leinster area being 20 inches in thickness or thereabouts on an average. This accounts to a large extent for the circumstance that the annual output per underground worker in Ireland is only 149 tons while in Great Britain it is 294 tons; for we have no reason to think that the Irish workman at the coal face is less diligent or skilful than the British workman. The colliery owner or prospective colliery owner is therefore in this difficulty. The miner is paid by the ton raised by him; the amount so raised is necessarily small; his weekly earnings are correspondingly small, and consequently the occupation of a miner has, up to the present, failed to attract to, and keep in its ranks, such an amount of labour as would lead to any considerable development of the Irish coalfields. On the other hand, if the owners in the present state of Irish development, were to increase the wages so as to bring the weekly earnings up to the British standard, they would find themselves unable to compete with the more favourably circumstanced mine owners on the other side of the Channel. At the same time, we are of opinion that there is a moderate future for the industry. The improved railway facilities recently provided in respect of Irish collieries, the high wages in Great Britain, the increased cost of carriage by sea and the use of coal cutting machinery make it possible for the Irish mine owner to compete on better terms in the future than he has been in the past. We indicate, hereafter, the extent in terms of labour and output, the development which, if our recommendations be given effect to, may be reasonably anticipated.

Suitability of Irish Coal.—Most of the Irish coal produced at present is anthracite, and the evidence goes to show that it is equal to the best British anthracite. Its calorific power is greater than that of bituminous coal, and there is no doubt that for domestic heating, if used in a proper stove, or in open fires with suitably designed grates, it is more economical than bituminous coal. For industrial purposes it is specially adapted for the production of suction gas, and as that method of power production for engines of 200 horse power or less is coming into great favour, a greater demand for Irish anthracite for this purpose may be expected in the future. For the production of steam power, the evidence indicates that with a forced draught, anthracite coal may be availed of with advantage. Since our public sitting, Mr. Laurence Kettle, Dublin City Electrical Engineer, has caused tests to be made which show the suitability for steam purposes of Irish anthracite coal, if used in a special furnace provided with automatic stokers.

For the present the difficulty lies not in the stimulation of demand for Irish coal, but in its production to meet the demand, which, as things stand, much exceeds the output.

Transport.—During the War, and presumably by reasons of the exigencies thereof, three railways were built—one of 10 miles from Dunmore (near Kilkenny) to the Castlecomer Collieries, one of 10 miles from Athy to Wolfhill (New Irish Mining Company's Collieries) and one from Arigna to the Arigna Mines to serve the Arigna district. What has been done in respect of the Leinster coalfield seems to be reasonably sufficient, for a considerable time at least. But the transport in respect of Arigna needs much improvement. The Lough Allen Canal is a fine waterway extending from the Arigna district to the Shannon at Bally Bridge and serving a district 140 miles in length; but it is spoiled by the fact that some of the locks are quite inadequate to take craft of reasonable size. The transport of coal was described by one of the witnesses as something like a Cool's tour. The coal goes from the pit to a cart; from the cart to the railway; from the railway into a small steamer to Carrick-on-Shannon; there it has to be reloaded into another steamer and so it finds its way to Killaloe. A proper transport system would require (1) an aerial

railway, (2) a broad gauge railway and (3) the widening of the locks of the Canal to enable a load of 150 tons at least to be brought by water. We commend the second and third of these much needed improvements to the attention of the Ministry of Transport, the aerial railway being a matter for the mining companies.

Housing for Miners.—The housing accommodation in connection with the mines is one that requires serious and immediate consideration. As things stand, many of the miners' cottages are situate considerable distances (in some instances four or five miles) from the pit's mouth, which fact involves, of course, much loss of valuable time and energy. Further if the existing mines are to be developed, many additional houses are required. The evidence before us is to the effect that decent houses could be built by the mine owners at the cost of about £500 per house, as the material can in most, if not all cases, be conveniently got on the spot. To enable houses of sufficient number to be built to form the nucleus of mining villages, we think special State assistance in the form embodied in our recommendations below should be given.

Anticipated Development.—With reasonable transport and housing facilities, we think the industry should show considerable growth. Our estimate of its probable increase under these circumstances is that the output and labour employed could be quintupled; in other words, we would estimate that the output should reach about 500,000 tons, and that the industry should employ about 4,000 hands. Apart from the possibilities of the Coalisland region and the development of existing mines, it is difficult to say whether an influx of much additional capital in Irish Coal Mining is to be expected, because the thinness of the seams, already referred to, prevents such big possibilities as are usually required to tempt capital into an industry which, to some extent, is in the nature of a gamble. But we indicate in our recommendations what seem to us to be the best steps to give a stimulus to the industry.

Part II.

LABOUR CONDITIONS.

Owing to the quality of Irish coal, the Irish coal mines at present in operation are not subject to danger from explosion or fire, and accordingly the number of accidents is very small.

The figures for the years 1912 to 1918 inclusive, are:—

Year.	Fatal Accidents.		Non-fatal Accidents Reported to Inspectors.		Non-fatal Accidents Durable for more than 7 days.	
	Accidents.	Deaths.	Accidents.	Persons Injured.	Accidents.	Persons Injured.
1912	Nil	Nil	5	6	60	61
1913	Nil	Nil	7	8	51	51
1914	Nil	Nil	3	3	20	20
1915	Nil	Nil	3	4		
1916	Nil	Nil	Nil	Nil		
1917	3	3	2	2		
1918	Nil	Nil	5	5		

Information not collected during the War.

On the whole, the mines are reasonably well ventilated and are managed with due regard to the health of those engaged in working them. On the occasion of

the visit of some of the Committee to one of the mines in the Arigna district, attention was directed to the inadequate ventilation of an adit, and though a prosecution, subsequently undertaken by the Inspector of Mines, failed, yet in the result the objectionable feature was got over by a discontinuance of working at the place in question. The head room in some of the mines in Arigna (2 feet 4 inches) seems to us to be altogether inadequate.

There have not been many disputes as to wages in the Irish coal mines. The rates of wages differ considerably in the various mines and, as one would expect, the highest wages are paid at the collieries with the best equipment and greatest output—the Castlecomer Company's collieries; and the lowest at the Slieveardagh collieries, which are run on anything but scientific or business lines. A fair average for the worker at the face at Castlecomer is £4 per week; at Slieveardagh the average of a worker at the face is £2 11s. per week; the average of the underground workers in the better collieries is £3 10s. a week or thereabouts.

With the exception of Castlecomer, the underground workers have a six-day week, with a daily shift of eight hours. In Castlecomer, following an old custom, the miners do not work every second Saturday, and there is consequently no drawing of coal on that day. In Slieveardagh the law seems to have been persistently violated by allowing men to work for ten hours underground per shift.

We wish we could make our recommendations in reference to hours and wages more favourable to the workers. But we are convinced that, for the present, we can go no further without running the risk of damaging the industry as a whole. The hearty co-operation of capital and labour is necessary if the coal mining industry of Ireland is to prove of real value to either. At the same time we think that in the near future a reconsideration of the question of hours and wages would be just and proper.

There does not seem to be any great demand for baths; but the owners have agreed that if a majority ascertained by ballot of one-half of the workmen employed in any colliery require baths, subject to the terms set forth in Section 77 of the Coal Mines Act of 1911, baths will be built, and that section shall be considered as amended accordingly.

Part III.

ADMINISTRATION AND OWNERSHIP OF MINES AND MINERALS.

It is, we suggest, obviously unsatisfactory in any country that the State should be utterly powerless to see that a national asset like coal—or any other mineral for that matter—should be worked to the best advantage. And this is still more glaringly unsatisfactory in a country like Ireland, where the working of minerals to the national advantage is frequently at the mercy of a small holder who, under our Land Purchase system, has become the owner in fee of his farm, and of the minerals thereunder.

We have had several instances brought to our knowledge of the action of owners of land, who have apparently no notion of working the minerals themselves, but who nevertheless have obstructed and prevented their working by persons anxious and able to do so. We deal in our recommendations with the steps necessary to prevent this in future, while safeguarding the rights of the owners of the minerals and making compensation to any person injured by the working.

From the administrative point of view Ireland is classed as part of No. 4—the Lancashire, North Wales, and Ireland—Division, and an English staff has control of the inspection and management of mines and of seeing that the various statutory

provisions which regulate them are carried out. The plans of Irish mines are kept in Whitehall, and are not available in Ireland. We consider this an eminently unsatisfactory position of affairs.

There are three State Departments in Ireland which have to do with mines and minerals.

L.—THE LAND COMMISSION.

A partial vesting of the minerals of Ireland in the State has taken place in pursuance of certain provisions of the Land Purchase Code. We cannot better explain the result of the legislative enactment, and the practice of the Land Commission, than by incorporating here the evidence of Mr. C. H. Crookshank, K.C., Legal Adviser to the Estates Commissioners.

Mr. Crookshank says:—

" Before the Act of 1903 the mineral rights in respect of lands sold through the Land Commission under the Land Purchase (Ireland) Acts did not become the property of that body. In most cases they became the property of the tenant purchasers, but in some cases they were reserved to the landlords or the persons entitled to the minerals at the date of sale.

" Before the Act of 1903, sales under the Land Purchase Acts were not, save in exceptional cases, sales of entire estates, but were sales of such holdings as the landlords had agreed on with the tenants to sell; thus landlord might have under these earlier Acts disposed of a few isolated holdings and remain the owner of the rest of the estate. In such case the mineral rights under the holdings sold have probably become the property of the purchasing tenants, leaving the ownership of the minerals on the rest of the estate unaffected by such sale.

" The Irish Land Act of 1903 (3 Edw. 7, c. 37), contemplated the sale of the whole estate by the owner, and Section 13 provides that the mineral rights under an estate sold under Part I. of that Act through the Estates Commissioners should be reserved to the Land Commission, but this section did not apply to (a) any demesnes resold to an owner under Section 3 of the Act; and (b) to any case where the vendor was not the owner of the mineral rights; or (c) to any stone, gravel, sand or clay. The section further provided that where the mineral rights are reserved to the Land Commission and are afterwards disposed of by the Commissioners, the vendor of the estate is to receive 25 per cent. of the net profit received by the Commission.

" Section 99 of the Act provided that the above section was not to apply to mineral rights which were not in possession or enjoyment of the vendor of the estate at the time of sale or to any mine or quarry which was being worked or developed by him at the time of sale.

" The result of these provisions is that, where at the time of the sale of an estate under the Irish Land Act, 1903-9, the mineral rights are the property of the vendor, but have neither been let nor worked by him, such mineral rights go to the Land Commission with the exception of mineral rights under a demesne repurchased by the owner, and stone, gravel, sand or clay.

" But though the mineral rights on the estate sold under the Act of 1903 passed to the Land Commission, this did not affect the mineral rights on any holdings which had at one time formed part of the property, but which had been sold under the Land Purchase Acts prior to 1903.

" Section 1 of the Irish Land Act, 1907, made provision for the disposal by lease or otherwise of the mining rights thus reserved, and *inter alia* provided that the powers conferred on the Land Commission by this section could only be exercised with the approval of the Judicial Commission after, where practicable, the ascertainment of the views of the person entitled to aforesaid percentage, and it also provided for the publication before any disposition is made of the

rights, of a notice by the Land Commission stating their intention to make a lease or sale, as the case may be, and inviting offers from any persons wishing to exercise the right.

"Section 37 of the Irish Land Act, 1903, further provided that the powers conferred by Section 1 of the Act of 1907, as to disposing of mining rights should include the power to demise such rights to any persons by way of Take Note or Prospecting Lease for any term not exceeding two years at such rent and upon such conditions as the Land Commission think proper with the option to the lessee to take a reversionary lease upon the like or such other terms as may be agreed on.

"This section also provides that a Royalty Rent, variable according to the price and value of the minerals gotten, or a fixed rent, or both, might be reserved by the Land Commission; and further that it should not be obligatory on the Land Commission to publish the advertisement, mentioned in the Act of 1907, on granting any such reversionary lease if an advertisement had been published before the execution of the Take Note or Prospecting Lease.

"Since these Acts of 1907 and 1909 the Land Commission have made twenty prospecting leases or Take Notes. In two of these the lessees have already taken out reversionary leases, and it is anticipated that on the expiration of the prospecting leases further reversionary leases will be taken out.

"In three cases leases have been made for terms of years without prospecting leases having been first taken.

"I beg to refer to the draft form of prospecting lease in use, which of course may be varied in exceptional cases. The terms are fixed by the Estates Commissioners and the Judicial Commissioner after considering offers received, consulting Mr. Lyburn, and obtaining the views of persons entitled to the percentage.

"It must be remembered that, in addition to sales through the Estates Commissioners, sales also take place to the Congested Districts Board of properties in the Congested Districts Counties on the western seaboard. In the majority of these cases the Board becomes the owners of the mineral rights, and where these properties are resold by the Board through the Estates Commissioners the mineral rights become the property of the Land Commission if not previously disposed of by the Board."

It will thus be seen that, so far as ownership is concerned, the undeveloped minerals of Ireland may be classified as follows:—

1. Those in the possession of the Land Commission by virtue of section 13 (3) of the Irish Land Act, 1903, i.e., the minerals under lands sold since the passing of that Act, and which undoubtedly constitute a majority of the purchased holdings of the country.
2. Those vested in tenant proprietors by virtue of the Ashbourne and other Acts of the Land Code prior in date to the year 1903.
3. Those belonging to the landlords whose estates have been agreed to be sold to the occupiers since the Land Act, 1903, but the sales of which still remain incomplete. In the bulk, if not all of these cases, the minerals will pass automatically to the Land Commission as soon as the vesting Orders are made.
4. Those belonging to landlords who have not yet agreed to sell to their tenants under the Land Code, and those reserved by Landlords out of sales made to tenants under the Ashbourne and other early Land Purchase Acts; and
5. Those belonging to individuals who are both owners and occupiers of the surface.

It will be noted that the Irish Land Commission have neither staff nor machinery nor funds to enable them to develop or exploit the mineral resources of Ireland. When they require advice as to the disposal of minerals vested in them, they have to seek the assistance of the Department of Agriculture, which lends them the services of Mr. Lyburn, the mineralogist in the service of the Department.

II. THE DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION (IRELAND).

This Department collects information and statistics, and has done admirable work in affording information and assistance not alone to the Land Commission, but also to any person *bona fide* interested in the subject.

III. THE GEOLOGICAL SURVEY OF IRELAND

This Department is concerned with the scientific rather than the economic side of the question. The staff consists of:—

1. The Director (part time), with a salary of £100.
2. The Senior Geologist (District Geologist), with a salary of £900, rising to £600 by £20 increments.
3. Three Geologists, with salaries of £120, rising by increments of £15 to £400.
4. One Curator and Superintendent of Maps, with a salary of £160, rising to £250 by increments of £7 10s.; and
One Typist.

The foregoing salaries are the same as those formerly in force in England and Scotland, and are subject to war bonus, but difficulty is found in filling vacancies, as the initial salary of £120 for a Geologist is insufficient to attract candidates with the necessary education.

In England and Scotland, the necessity for obtaining the best men has been met by advancing the rates of pay of all officers from the Director to Geologists, according to the following scale, it being acknowledged that the staff was formerly insufficiently paid, and that the advance was made on pre-war basis, and not to meet the stress of war conditions.

Director of Geological Survey and Museum of Practical Geology, £1,200.

Assistants to the Director, £700, rising to £800 by £25 increments.

District Geologists, Petrographer and Palaeontologist, £520, rising to £650 by £20 increments.

Geologists and Assistant Palaeontologists, £150, rising to £500 by £15 increments.

We further learn that until the year 1891 the Irish and Scottish Geological Surveys were considered equivalent, and were staffed on the same basis. Later, the Irish staff was reduced to five, on the ground that the survey of the country was complete and that only revision work was needed. In England, revision work exclusively has since gone on with undiminished staff, and in Scotland it has been carried on concurrently with the primary survey, which is not yet complete. The Scottish staff still have eleven technical posts, namely:—

One Assistant Director	£700-20-800
Two District Geologists	...	520-20-650
Seven Geologists	150-15-500
One Assistant Palaeontologist	...	150-15-500

That there is great need in Ireland of extensive revision work of an economic nature is demonstrated by the fact that the present staff has, by the application of modern methods, completely revolutionised the state of knowledge of the structure and resources of two of the five coalfields.

Part IV.

RECOMMENDATIONS.

1. We are all emphatically of opinion that the responsibility for seeing that the mineral resources of the country (including coal) are fully developed and should be placed upon the shoulders of some Irish State authority. The present smallness of the coal and other mineral industries does not, perhaps, warrant the appointment of a Minister of Mines, but we consider that a beginning might be made either (1) by constituting the Minister of Transport a Minister of Mines as well, or (2) by establishing a Department of Mines within the Department of Agriculture and Technical Instruction. The former suggestion has one obvious advantage, that as the development of mines and minerals so largely depends on the development of transport, the functions of the Minister, in relation to mines and minerals, dovetail, so as to form part of his functions as Minister of Transport.

The advantages of the latter course are stated in a memo. by Captain Prior Wandesforde as follows :—

- (a) There is at present no Irish Minister of Transport, but merely an official, with an office in Dublin, who is subordinate to the British Minister of Transport.
- (b) The Transport Department is now in its infancy, whereas the Department of Agriculture has existed for a considerable time and has a considerable portion of the requisite machinery already at its disposal.
- (c) The Department of Agriculture has its President in Parliament and is in a better position to deal with the Treasury than an Irish official who would require to act through a British Minister.
- (d) In matters relating to the development of the mineral resources, etc., of the country, the Department of Agriculture has already exercised its functions for several years, e.g., the collection of information and statistics, etc.
- (e) The Geological Survey of Ireland is a branch of the Department of Agriculture.
- (f) The Department of Agriculture has officers on its staff who are fully acquainted with the mineral resources of the country, and thus already provides the nucleus of the new branch to deal with mining matters.
- (g) The Department of Agriculture is responsible for the College of Science in Ireland, which will be fully equipped with the necessary chemical and other laboratories, etc., for mineralogical research.

2. We consider that such Minister or Department should have very wide powers and discretion, and should, of course, have, at his or its disposal, an initial grant and adequate funds for the discharge of the duties. Amongst such powers and duties we suggest should be included the following :—

- (a) The general powers of inspection and administration under the various statutes regulating coal mines.
- (b) The general supervision and control of the Geological Survey Department in Ireland. We suggest :—
 - (1) That the advances granted to the English and Scottish Geological staffs should be granted to equivalent posts in Ireland, thus making it possible to obtain suitable candidates for the vacancies.
 - (2) That upon reconstruction the Irish Geological Survey should be finally established on the same basis as the Scottish Geological Survey.
 - (3) That there should be attached to it a mineralogical laboratory with a trained chemist and assistant.

- (c) The establishment of such laboratories as may be necessary.
- (d) The education of the public and of those specially interested, through the medium of a publications branch.
- (e) Very wide powers in connection with boring or other explorative processes. The Minister, or Department, should have full power to search for minerals, subject to proper provision for compensation, and subject to appeal. We think that such powers should be capable of being exercised even in respect of minerals that have been leased or disposed of to a mine owner, by whom they are not being fully worked or developed at the time.
- (f) Powers of leasing or disposing of unworked minerals anywhere in Ireland, making compensation to the surface owner for surface damage and also allowing the owner of the minerals a percentage on royalties, the amount of such compensation and percentage on royalties, in case of difference, to be determined by a tribunal, the royalty in no case to exceed, in the case of coal, 6d. per ton. In ascertaining such percentage of royalty payable to the owner of the minerals we are of opinion that regard should be had to the possibility of the owner making use of the minerals himself had not the State interfered; for, if such possibility be remote, we consider that the percentage on royalty should be correspondingly small. The powers now vested in the Land Commission should be transferred to the Minister or Department of Mines, and the provision as to percentage in the Irish Land Act of 1903, Section 13, not to be disturbed.
- (g) In the case of any mine which shall not be worked so as to secure the maximum output, or which shall be worked in an uneconomic manner, or in a manner calculated to endanger the safety of persons employed therein, power to the Minister:
 - (1) to prohibit the working of any such mine; and
 - (2) to make a lease or disposition of the mine upon such terms as to compensation or otherwise as the Minister may think just.
- (h) The powers above, (e) (f) and (g), to be exercised subject to a right of appeal, either to a strictly legal tribunal or to the Privy Council, who should have power to vary as well as reverse the proposed Order by the Minister or Department of Mines, and to determine the compensation in case of dispute.
- (i) Power to appoint Conciliation Boards or similar tribunals with a view of helping to an adjustment of disputes between mine owner and mine worker.
- (j) Power to inspect the mine owner's books, and power to compel the keeping of proper accounts.

3. We recommend that the boring at Washing Bay should be carried out to a depth of 3,700, feet the estimated cost of which is £5,250. It seems a pity that the boring to 1,766 feet which already has cost approximately £15,000 should be altogether abandoned just as it approaches coal measures.

4. We recommend that the waterway from Arigna district should be improved so as to allow craft of at least 160 tons load to pass through, also that a broad gauge railway be provided from Arigna to Ardcaern.

5. We think housing so necessary for a full development of the coal industry, that it should receive special help from the State. We think that this help should be afforded by a subsidy of £160 for each house with a loan of the balance necessary at a reasonable rate of interest. The subsidy and loan could be given either (a) to the local authority or (b) to the mine owner on the security of the colliery or (c) to the miners themselves, if associated in Building Guilds. Where a suitable house is owned by a miner, but is temporarily out of repair, we recommend that a small loan be made to him, not exceeding £50, for the purpose of repair.

6. The agreement as to baths, hereinbefore mentioned, makes it unnecessary for us to make any recommendations for legislative enactment in reference thereto.

7. We recommend that the statutory hours of underground workers should be reduced to seven and a half hours, with a corresponding decrease in hours of over-ground workers. The present eight-hour day to continue to apply to all boilermen, pumpmen and watchmen.

8. We do not recommend any legislation in reference to wages. We think, however, that the rates of increase of wages following should be adopted:—

Castlecomer Collieries and New Irish Mining Company's Collieries eight and one-third per cent. increase to underground workers. Overground workers earning 40s. 0d. a week or upwards five per cent. increase. Overground workers earning less than 40s. 0d. to get eight and one-third per cent. increase.

(Captain Wandesforde, while agreeing to the Report, thinks that it is somewhat inequitable that the same percentage of increase should apply to the Castlecomer Collieries as to other collieries, inasmuch as the wages paid to underground workers at Castlecomer are higher than the wages paid at any other collieries in Ireland).

Slievardagh Collieries twenty per cent. increase to all workers.

Arigna and other mines—ten per cent. increase to underground workers; overground workers earning 40s. 0d. a week or upwards five per cent. increase; overground workers earning less than 40s. 0d. a week to get eight and one-third per cent. increase.

9. We recommend that as to "bad places" (that is places where the conditions are unfavourable to a normal output) where two-thirds of the men so require, a local Committee shall be formed consisting of two members nominated by labour, two by the mine owner, and an impartial chairman, to decide all questions of dispute.

10. We recommend that for the present there should be no statutory restriction on mine owners' profits.

Part V.

NATIONALIZATION.

No evidence was given in support of nationalization of coal mines in Ireland.

Part VI.

MISCELLANEOUS.

We have to express our indebtedness to the many witnesses who attended, some of them at great inconvenience, to give evidence before us. In particular we are under an obligation to Mr. Lyburn, whose evidence and assistance, both at the inquiry and otherwise, were of the utmost value.

We also desire to place on record our appreciation of the services of our Secretary, Mr. Lawlor, who was indefatigable in the discharge of his duties. He showed great skill and ability in collecting information prior to the inquiry; in arranging the order of witnesses; in revising proofs, and in documenting the evidence, so that, largely owing to his efforts, an inquiry which ran into ninety-five foolscap pages of printed matter was got through without a hitch in four days.

JAMES O'CONNOR.

THOMAS FORAN.

MICHAEL GILMARTIN.

ML. LAYDEN.

Wm. O'BRIEN.

J. J. PARKINSON.

R. H. PRIOR WANDESFORDE.

GEORGE W. LAWLOR,

Secretary.

23rd February, 1920.

ADDENDUM TO REPORT
OF
IRISH COAL INDUSTRY COMMITTEE
BY

MESSRS. THOMAS FORAN, MICHAEL GILMARTIN AND ALDERMAN WILLIAM O'BRIEN.

STATE CONTROL AND NEED FOR DEVELOPMENT OF COAL RESOURCES.

We agree with the conclusion that the coal mines should be directed by a National Authority, but we arrive at that by a different course of thought.

We consider that the coal measures should be worked by the National Authority with a view to ensuring that Ireland may in time of emergency be as nearly as possible self-supporting in respect of fuel. We recommend that the coal measures should be worked and the mines kept in such a condition as to enable the production of coal to be extended and increased rapidly when need arises, even though it be more costly to raise in Ireland than to import.

While due consideration must always be given to the cost of adopting such a policy—a policy which necessitates national ownership and control—it is obvious that the ordinary commercial standards of economy are not applicable.

We therefore recommend that the national policy should be to utilise the Irish coal supplies for the public services, and that any excess of cost of production over the price of imported coal, should be borne out of the National Exchequer.

NATIONAL OWNERSHIP AND COMPENSATION.

We lay down as vital and fundamental this principle: that no man or body of men; no person or government, native or alien, home or foreign, now or at any time has had or can have any right or authority to give, bequeath, sell, or bestow, or in any way alienate the mineral deposits lying under the soil of Ireland. This mineral wealth belongs to the people of Ireland.

While prepared to recommend that any wise and necessary expenditure undertaken by the present owners with a view to facilitating the extraction of coal should be recouped, we cannot recommend the payment of any compensation to the present legal proprietors except as a matter of grace which must be dispensed by the Irish people through their authorised spokesmen.

SUGGESTED EXTENSION OF POWER OVER MINES TO MINISTRY OF
TRANSPORT.

As a temporary provision, pending the establishment of an Irish authority for the control and development of Ireland's economic resources, we approve of this recommendation, with this proviso: that the Minister shall act in consultation with a committee to be appointed by the elected Members of Parliament for Ireland, this committee to have power to veto any proposal which in its judgment is detrimental to the interests of Ireland.

THOMAS FORAN.
MICHAEL GILMARTIN.
WM. O'BRIEN.

23rd February, 1920.